June 29, 2015

VIA ELECTRONIC FILING

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions, GN Docket No. 12-268;
Broadcast Incentive Auction Comment Public Notice Auction 1000, 1001 and 1002, AU Docket No. 14-252

Dear Ms. Dortch:

The Expanding Opportunities for Broadcasters Coalition (the "Coalition") hereby submits these Informal Comments pursuant to Section 1.1206 of the Commission's rules to encourage the Commission to adopt a fixed reverse auction bidding decrement of one-percent of a station's opening price, in each round of the reverse auction. This proposal will produce an auction that is easier for broadcasters and creates more efficient outcomes with only a marginal change in the overall length of the auction.

The rate at which prices will descend from the initial process offered by the Commission is one of the more important, but less frequently discussed, details of the reverse auction design. In the *Auction Comment Public Notice*, the FCC originally proposed dropping the prices for broadcasters between three and ten percent of the prior round's price in each subsequent round, subject to change "at any point during the reverse auction based on bidding activity during the auction."[1] Not a single commenter supported the agency's

[1] *See In the Matter of Broadcast Incentive Auction Comment Public Notice Auction 1000, 1001 and 1002; Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions*, AU Docket No. 14-252 & GN Docket No. 12-268, FCC 14-191 (rel. Dec. 17, 2014) ("*Comment PN*").

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proposal. Instead, those commenters addressing this issue coalesced around the Coalition's proposal to drop prices by one percent of the opening price each round. As we explained, this approach "will simplify the bidding process, increase opportunities for outcome discovery, result in more exact exit values, and allow bidders to prepare in advance, with full knowledge of the prices that will be offered in each round."[2] Although we appreciate the FCC staff's attempt to simplify its original proposal, its current proposal remains flawed. A 5% reduction in the initial rounds of the auction is far too large. Moreover, changing the decrements during the auction adds an unnecessary level of complexity.

Reducing prices by 5% in the initial rounds of the auction will destroy opportunities for outcome discovery, result in inefficient outcomes, compromise the ability of bidders to make rational decisions about participation, and likely hinder the ability of broadcasters to elect the option to move to VHF. As the attached paper by auction economist Peter Cramton explains, outcome discovery will be particularly important for certain bidders in the reverse auction.[3] Yet, with 5% decrements at the start of the auction, stations could see their prices drop by up to $45 million in a single round, and all prices will fall by more than 30% in just the first eight rounds of bidding. **At four rounds per day, this 30% drop would occur in just the first two days of the auction!** This rapid decline will not provide any opportunity for broadcasters to make critical decisions about how to participate in the auction.

From the Commission's perspective, the combination of a 5% decrement and the absence of intra-round bidding[4] will likely produce inefficient outcomes, freezing stations in the wrong sequence. For example, assume Stations A and B are perfect substitutes, but Station A has a

[2] Comments of the Expanding Opportunities for Broadcasters Coalition, AU Docket No 14-252, GN Docket No. 12-268 at 5 (Feb. 19, 2015).
[3] Peter Cramton, *Bid Decrements and Proxy Bidding* (June 26, 2015), attached hereto as **Exhibit A**.
[4] In the *Incentive Auction R&O*, the FCC committed to "provide participating broadcasters with the optional flexibility of 'intra-round bidding,'" which would allow broadcasters to specify an intermediate exit price if the bid in a given round is too low. *Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions*, Report and Order, 29 FCC Rcd. 6567 ¶¶ 115-16 (2014). If the Commission now abandons this approach, it is particularly important to adopt smaller bid decrements that will help achieve the same result.

reservation value of 98 and Station B has a reservation value of 96. Both would accept an opening bid of 100. With either 1% decrements or intra-round bidding, market forces would cause Station A to drop out at 98, allowing the FCC to repack Station A (which places the highest value on continuing as a broadcaster) and freeze Station B at 98. Without small decrements or intra-round bidding, however, both stations would reject the Round 2 offer of 95. The Commission would then have to resort to a randomized queue, where it is equally likely that A or B will be repacked, while the other would be frozen and paid 100. Thus, half the time, the wrong station would be repacked because the broadcasters have no opportunity to adequately express their true preferences. Moreover, the FCC would pay a higher price to the frozen station than it would have paid in a functional market. The Commission should not resolve such significant decisions, with long term business and financial implications, through what effectively is the flip of a coin.

A needlessly rapid progression through the critical rounds of the auction will also skew bidding behavior, particularly as it relates to moves involving the VHF band. Under the FCC's proposed pricing formula, many stations will be entering the auction at prices very close to their reservation values, so a high level of activity can be expected early in the auction. 5% price drops will compress this activity into a very short time period, creating a very difficult environment for bidders trying to evaluate their options, especially for bidders considering multiple options, such as moving to VHF or channel sharing, where they have to consider not just absolute prices, but relative prices between the different options. The challenge for broadcasters is exacerbated if they include VHF vacancy calculations, which are difficult in the even the simplest of cases. By using large, but decreasing, master clock price decrements, it may make VHF price movements erratic and difficult for bidders to understand.

Finally, the staff proposal continues to fail the test of simplicity by adjusting the methodology for calculating bid decrements during the reverse auction. With a fixed decrement of 1% of opening prices, broadcasters can easily determine the exact dollar amount by which their bids will fall each

round. Instead, the staff proposal would cause prices to change by a different amount each round at the start of the auction. Then, approximately 30 rounds into the auction, the methodology would change. For an unsophisticated station owner, this may be too difficult to understand, making auction participation far more complicated than it should be.

The staff proposal will be particularly difficult for noncommercial public broadcasters, who: (i) are not used to operating in a competitive commercial marketplace; (ii) are not sufficiently flush to afford auction economists and consultants to help them with dispatch; and (iii) many of whom have complex governance structures (large community boards, state governmental entities, boards of education, boards of regents, etc.) that are not capable of functioning as quickly as commercial broadcasters. Given the critical importance of maximizing participation by noncommercial broadcasters to the success of the auction, the Commission should not adopt procedures that would render more difficult their involvement.

Using the Coalition's proposed 1% of opening price decrements would not lead to an excessively long auction. By definition, the reverse auction would end - hitting $0 - in a maximum of 100 rounds. The wildly successful AWS-3 auction lasted more than 340 rounds.

For all of these reasons, we encourage the FCC to adopt a fixed reverse auction decrement of one percent of opening prices each round. Although this approach could extend the length of the reverse auction by a couple weeks, that seems like a small price to pay for a simpler, more efficient auction.

Respectfully Yours,

/s/ Preston Padden /s/

Preston Padden
Executive Director
Expanding Opportunities for Broadcasters Coalition

Bid Decrements and Proxy Bidding

Peter Cramton, University of Maryland, 26 June 2015

Outcome discovery requires the auction to occur at a gradual pace

One thing is clear: it will make sense for the FCC to maintain a steady and gradual pace in the reverse auction. A one percentage point price reduction from the opening price is desirable each round. This will give bidders time to make critical decisions and will enable bidders to plan on when these critical decisions will need to be made. Further there is no possibility that the auction can continue too long. The auction is sure to end within one hundred rounds, as prices reach zero at round 100. A small decrement is especially important in the event that the FCC decides not to use intra-round bidding. Otherwise, an unnecessary inefficiency appears that is directly related to the size of the decrement. The 1 percent decrement would increase the length of the auction by at most two weeks—a trivial amount of time given the stakes involved.

Proxy bidding and small decrements are complementary

The need for outcome discovery will surely vary by bidder. Small bidders with especially simple decision problems may not value outcome discovery. Nationwide bidders with complex portfolio, budget, and other aggregate constraints may have a great need for outcome discovery. A small decrement of 1 percent of the opening price together with proxy bidding offers the best of both worlds. Proxy bidding reduces bidder participation costs for those with simple decision problems, and the 1 percent decrement provides ample outcome discovery for the large bidder. There is no downside to this approach. Proxy bidding is a well-recognized feature of a state-of-the-art clock auction implementation.

As an example, consider a single-station broadcaster. Suppose the broadcaster has a firm exit price of $250. The broadcaster does not care about outcome discovery. The FCC clock starts at $1000 and the clock ticks down $10 per round.

With proxy bidding the bidder can submit an exit bid of $250 in round 1, and then never log into the system again. This is much easier than entering the bid "I'm in." in each of the first 75 rounds.

However, should the bidder change its mind and decide it wants to exit at $300, the bidder can do so in any round until the clock price falls below $300.

Large bidders would care a great deal about outcome discovery and therefore likely would not want to take advantage of proxy bidding. However, its presence does not harm the large bidder in any way.

A small and fixed decrement provides the needed outcome discovery without any possibility of an excessively long auction. And proxy bidding assures that a small bidder with a simple decision problem can participate in the auction in a simple way.

In the worst case, the auction may last more than one month. But this is completely appropriate for a once-in-a-lifetime event that will determine the market structure both in broadcasting and in mobile broadband for decades to come.